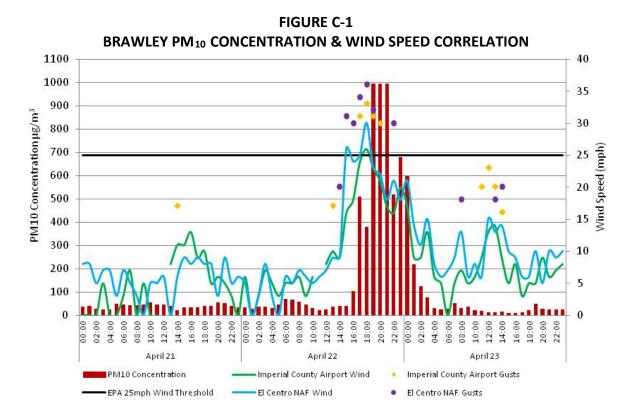
Appendix C Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on April 22, 2016. Note that wind speed measurements may be taken at any time during the hour. Therefore, the following graphs may reflect only the hour in which wind measurements were taken, and not necessarily the exact time.

IMPERIAL COUNTY SITES (FIGURES C-1 to C-5)



Figs C-1: Brawley saw increased hourly concentrations in response to dust being transported downstream. Brawley does not measure wind speed data. Air quality data from the EPA's AQS data bank. Wind data from the NCEI's QCLCD system

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¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); http://w1.weather.gov/glossary/index.php?letter=w

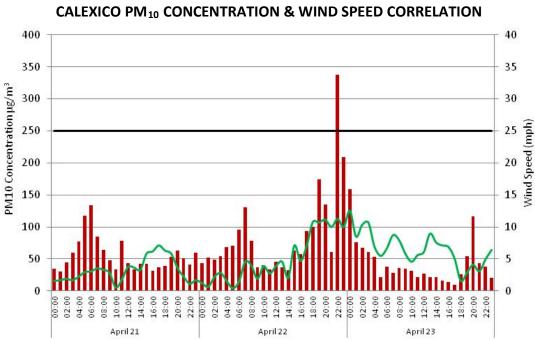


FIGURE C-2

Fig C-2: Winds at Calexico station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank

FIGURE C-3

WindSpeed

EPA 25mph Wind Threshold

■ PM10 Concentration

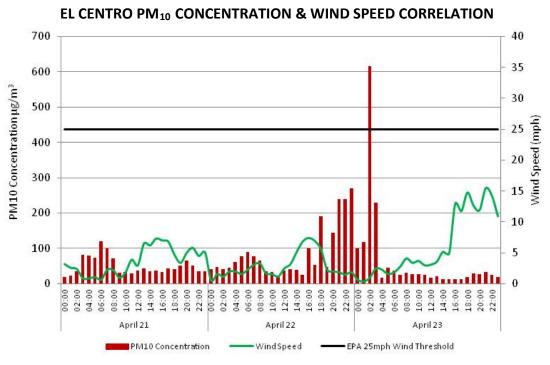


Fig C-3: Winds at El Centro station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank

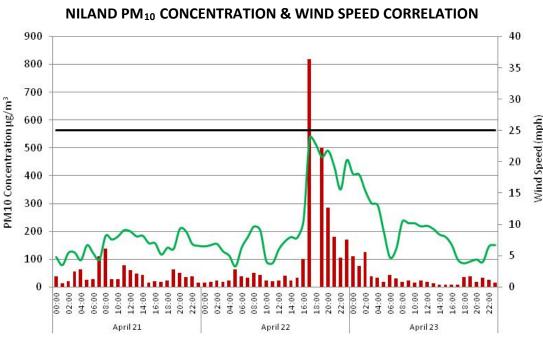


FIGURE C-4

Fig C-4: Winds at Niland station did not exceed the 25mph wind threshold but the monitor still measured elevated concentrations. Air quality and wind data from the EPA's AQS data bank

Wind Speed

EPA 25mph Wind Threshold

PM10 Concentration

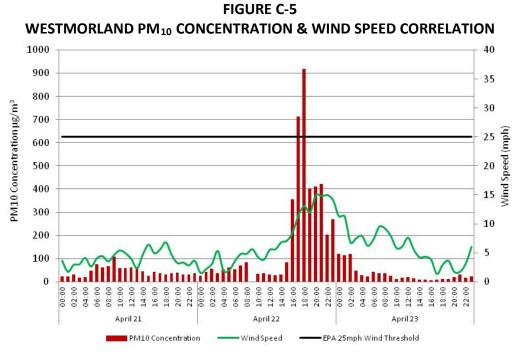


Fig C-5: Winds at Westmorland station did not exceed the 25mph wind threshold. However, dust suspended by higher winds upstream settled out of the air as lower winds passed over the monitor. Air quality and wind data from the EPA's AQS data bank

EASTERN RIVERSIDE COUNTY MONITORING SITES

FIGURE C-6 TORRES MARTINEZ DESERT CAHUILLA TRIBAL PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

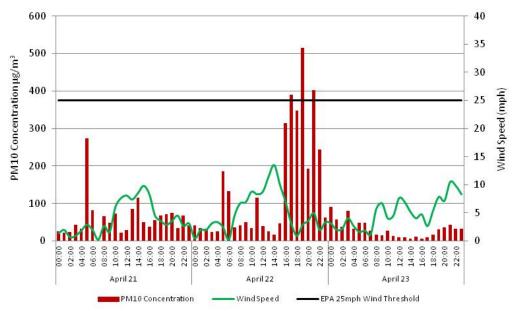


Fig C-6: Winds at the Torres Martinez Desert Cahuilla Indians Reservation station did not exceed the 25mph wind threshold. However, the monitor still measured elevated PM_{10} levels. Air quality and wind data from the EPA's AQS data bank

FIGURE C-7 INDIO (JACKSON ST) PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

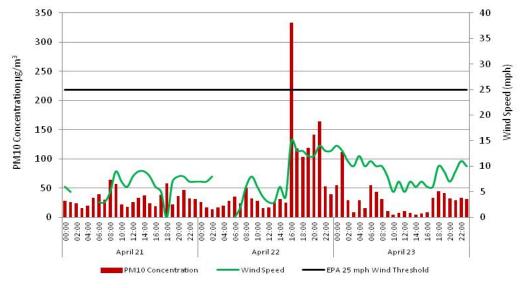


Fig C-7: Winds at the Indio (Jackson St) station did not exceed the 25mph wind threshold. However, the monitor still measured elevated PM $_{10}$ levels. Air quality and wind data from the EPA's AQS data bank

FIGURE C-8
PALM SPRINGS FIRE STATION PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

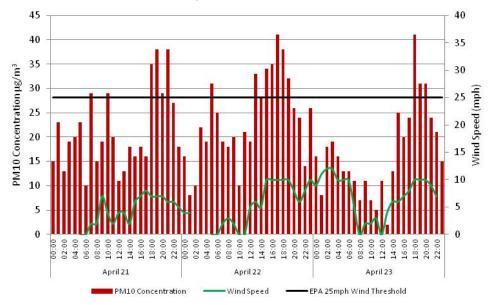


Fig C-8: Winds at the Palm Springs Fire Station did not exceed the 25mph wind threshold. However, the monitor still measured moderately elevated PM₁₀ levels. Air quality and wind data from the EPA's AQS data bank

SOUTHWESTERN ARIZONA

FIGURE C-9 YUMA, ARIZONA SUPERSITE PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

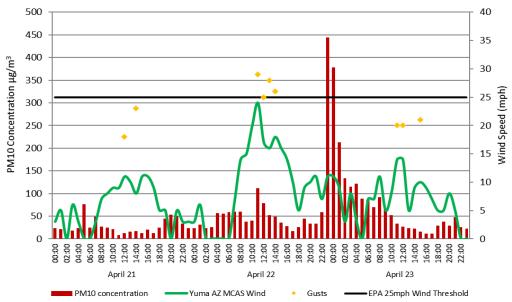


Fig C-9: Yuma Supersite saw a small rise in PM $_{10}$ concentrations in response to an increase in winds mid day. Air quality data from the EPA's AQS data bank. Wind data is from the NCEI's QCLCD system